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Strengthening of the coordination of humanitarian and disaster relief assistance of the United Nations, including special economic assistance: strengthening of international cooperation and coordination of efforts to study, mitigate and minimize the consequences of the Chernobyl disaster

Optimizing the international effort to study, mitigate and minimize the consequences of the Chernobyl disaster

Report of the Secretary-General

Summary

The present report is submitted in accordance with General Assembly resolution 65/131 on the strengthening of international cooperation and coordination of efforts to study, mitigate and minimize the consequences of the Chernobyl disaster. In the resolution, the Assembly requested the Secretary-General to submit to it at its sixty-eighth session a report containing a comprehensive assessment of the implementation of all aspects of the resolution.

The report records the activities undertaken by the funds, programmes and specialized agencies of the United Nations system to promote recovery from the Chernobyl disaster. It emphasizes the importance of the ongoing inter-agency cooperation, depicts the role of the United Nations Development Programme (UNDP) in coordinating inter-agency efforts on the implementation of the Decade of Recovery and Sustainable Development of the Affected Regions (2006-2016) and emphasizes that the United Nations will continue to address the pending needs of the Chernobyl-affected communities. The report concludes that the organizations and bodies of the United Nations system are committed to the goal of helping the Chernobyl-affected communities to return to normalcy, assisting the most vulnerable and ensuring the long-term sustainable development of the affected territories. United Nations country teams will make a continuous effort to keep the issue of post-Chernobyl recovery high on the inter-agency and international agendas.

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In the remaining years of realizing the United Nations action plan on Chernobyl to 2016, UNDP, in its role as lead agency for United Nations activities on Chernobyl, is prepared to lead the dialogue with the relevant organizations of the United Nations system and Member States on the future of inter-agency cooperation on Chernobyl and other man-made disasters. It is committed to giving a stronger voice to the human dimension of preparedness for and recovery from nuclear emergencies at the United Nations level and to incorporating that knowledge and experience into UNDP developmental programming worldwide.

I. General situation

1. Since the accident at the Chernobyl nuclear plant on 26 April 1986, the affected regions of Belarus, the Russian Federation and Ukraine have been supported by a broad range of United Nations initiatives. In 2004, the Secretary-General announced the transfer of the responsibility for United Nations coordination of Chernobyl activities from the Office for the Coordination of Humanitarian Affairs of the Secretariat to the United Nations Development Programme (UNDP). In place of the emergency humanitarian assistance delivered in the 1990s, the United Nations opted to focus on a "development approach", the creation of new livelihoods, better economic opportunities and the restoration of community self-reliance and self-sufficiency. The General Assembly endorsed that approach and proclaimed 2006-2016, the third decade since the Chernobyl accident, as the Decade of Recovery and Sustainable Development of the Affected Regions. The United Nations action plan on Chernobyl to 2016 was agreed by the relevant organization of the United Nations system as a practical framework for cooperation during the Decade. During the midterm review of the action plan, the agencies agreed on priorities for the second half of the Decade.

2. On 28 March 2012, UNDP organized an inter-agency coordination meeting on Chernobyl at the headquarters of the International Atomic Energy Agency (IAEA) in Vienna. It focused on United Nations activities in the second half of the United Nations action plan on Chernobyl to 2016. The organizations agreed that the overall shift to the development phase in Chernobyl-related programming had been working well and that the targeted assistance should continue in the remaining years of the Decade of Recovery.

3. The Governments of the three most-affected countries have put significant effort into overcoming the legacy of Chernobyl (for the reports of Belarus and Ukraine describing Government recovery efforts, see annexes I and II). Constructive joint work by the organizations and bodies of the United Nations system has been encouraging. Community-based projects in the Chernobyl-affected areas have helped to improve the livelihoods of people. The International Chernobyl Research and Information Network project has been working to provide information to local populations in accessible, non-technical language. At the Chernobyl nuclear power plant, significant progress has been made on the construction of the new safe confinement and on the development of infrastructure for safe, long-term management of radioactive waste.

4. At the same time, the Chernobyl-affected areas continue to face numerous socioeconomic challenges, such as the lack of economic opportunities and stigma associated with Chernobyl. Young people and skilled workers tend to move away, investors shun the region, and joblessness is high.

II. Coordination of the work of the United Nations on Chernobyl

5. The transfer of system-wide responsibility for recovery efforts to UNDP from the United Nations Office for the Coordination of Humanitarian Affairs marked an important change in the United Nations strategy on Chernobyl, namely, a shift from humanitarian response to developmental assistance. Since 2004, the Administrator

of UNDP has been serving as the United Nations Coordinator of International Cooperation on Chernobyl, facilitating the joint effort of 12 organizations of the United Nations system, Belarus, the Russian Federation and Ukraine. The Office of Coordination of International Cooperation on Chernobyl functions as part of the UNDP Regional Bureau for Europe and the Commonwealth of Independent States, and manages day-to-day coordination responsibilities.

6. In order to share information and ensure better coordination, UNDP organized meetings of the Inter-Agency Task Force on 26 January 2011, 26 April 2012 and 23 May 2013. The Administrator of UNDP chaired the meeting in 2013 and the Associate Administrator chaired them in 2011 and 2012. The meetings involved more than 70 participants in 12 different locations. Such wide participation demonstrated the continued engagement of the United Nations family in Chernobyl-related efforts and the commitment of the United Nations and other organizations to helping to empower communities in their recovery efforts.

7. The 30 March 2012 planning and coordination workshop on the United Nations action plan on Chernobyl to 2016 was held at IAEA headquarters. It attracted the participation of international organizations (IAEA, the World Health Organization (WHO), the World Bank, the International Federation of Red Cross and Red Crescent Societies, UNDP and the United Nations Scientific Committee on the Effects of Atomic Radiation) and the national authorities of the three Chernobyl-affected countries and provided a platform for discussion, in particular on progress with the implementation of the action plan. The participants discussed the need for continuing international assistance in addressing the problems of the Chernobyl-affected areas. Namely, participants agreed on the importance of developing initiatives by the United Nations family aimed at the recovery and development of the Chernobyl-affected communities, in particular with a focus on the prevention of peatlands/forest fires.

III. Ongoing United Nations assistance efforts

8. In the course of implementing the United Nations action plan on Chernobyl to 2016, United Nations country teams in each of the three most-affected countries have continued to provide an excellent example of joint United Nations action in pursuing a developmental approach to Chernobyl programmes. The activities have been organized into 10 main categories: (a) provision of scientifically sound information on the effects of the Chernobyl accident; (b) community-based development; (c) subregional cooperation; (d) policy advice; (e) infrastructure; (f) health; (g) radiation mitigation and standard-setting; (h) reactor safety and nuclear waste management; (i) environmental security; and (j) other initiatives.

A. Provision of scientifically sound information on the effects of the Chernobyl accident

9. The International Chernobyl Research and Information Network programme, aimed at enhancing human security in the Chernobyl-affected areas of Belarus, the Russian Federation and Ukraine, is an example of a joint United Nations initiative, from design to implementation. The organizations involved (IAEA, UNDP, the United Nations Children's Fund (UNICEF) and WHO) work on disseminating

information about the consequences of the Chernobyl nuclear accident in the form of practical advice on healthy and productive lifestyles to the residents of the Chernobyl-affected areas.

10. Funded by the United Nations Trust Fund for Human Security, and officially launched in 2009, the programme aims to reach an estimated 150,000 to 200,000 people by 2013. Provision of the latest scientific knowledge about the accident's consequences on health and the environment is helping to dispel misconceptions and to empower the affected communities to maximize social and economic recovery. In Belarus, the programme targets the affected areas of the Brest, Gomel and Mogilev regions. In the Russian Federation, it supports initiatives in the Bryansk, Tula, Kaluga and Orel regions. In Ukraine, it focuses on the affected areas of the Chernihiv, Kyiv, Zhytomyr, Rivne and Volyn regions.

11. In 2010-2013, the implementing agencies of the Network produced numerous information materials for a variety of local stakeholders. The scientific board of the Network reviewed information packages and ensured that they were factually accurate, up to date, consistent and convincing. Training activities were conducted for teachers, medical professionals, community leaders and media representatives.

12. IAEA has put emphasis on elaborating and providing practical advice on questions related to radiation protection and food safety in the daily lives of the residents of the Chernobyl-affected areas. The information materials on radiological issues were developed for different target groups, including local authorities, teachers and the general population, in order to explain local radiological data and to provide background information. The materials were distributed across different channels, including a specifically developed Internet portal. Currently, the general public, local professionals and decision makers have access to official data on local radiological conditions, such as the contamination of affected territories by key radionuclides of Chernobyl origin (see www.chernobyl.info). The work has been conducted by leading national experts from Belarus, the Russian Federation and Ukraine. The information provided is well accepted by the local populations and the continuous availability of first-hand information contributes to both the reduction of exposures and to the build-up and maintenance of confidence in official information.

13. In 2010-2013, UNDP worked on opening 19 information and communications technology (ICT) centres in the remote and rural Chernobyl-affected communities of the three countries. Co-location of the ICT centres with local community centres, such as libraries or cultural and educational institutions, was viewed as the most appropriate option. Local authorities provided free space for the centres and contributed to repair work and other relevant expenditures through regular region/village budgets. In Belarus, the International Chernobyl Research and Information Network established a partnership with the leading national Internet provider "Beltelecom" to arrange free Internet access for local communities in the ICT centres. Workshops on the sustainability of the ICT centres were conducted in all three countries and training programmes on radiation safety were held for the staff of the centres.

14. UNDP also organized training programmes on healthy lifestyles, utilizing a peer-to-peer education approach. The training aimed to empower local stakeholders with information on how to live a healthier, more secure and prosperous life. As part of a larger endeavour with journalists, UNDP took the lead in organizing subregional trainings for media representatives from Belarus, the Russian

Federation and Ukraine. The events were supported by all four implementing agencies of the International Chernobyl Research and Information Network.

15. In addition to providing information support, community-based development was encouraged, through the implementation of small-scale initiatives, for example, on the water supply; diagnostics for thyroid cancer; the renovation of public facilities; and other activities aimed at reducing scepticism and on overcoming the "victim's syndrome".

16. The advisory committee of the International Chernobyl Research and Information Network, created under UNDP leadership, continued its work in 2010-2013. Set up to coordinate the activities of the project, it provided a "steering" mechanism for the implementing agencies and a platform to discuss and ensure the optimal transformation of activities into outputs, facilitating cooperation between relevant partners and stakeholders.

17. In Belarus, UNICEF succeeded in conducting an awareness-raising "Facts for life decade" campaign, with a focus on the basic facts that parents and other caregivers should know about the health and development of children. Experts from a number of institutions, such as the Belarusian State Medical University, Belarusian Medical Academy of Post-Graduate Studies, Republican Scientific and Practical Centre "Mother and Child", National Institute of Education, Gomel Regional Clinic Oncological Dispensary, Minsk City Centre of Hygiene and Epidemiology, Republican Scientific and Practical Centre of Traumatology and Orthopaedics, met with 431 adults and 122 children and young people in 10 affected locations in the Mogilev and Gomel regions, engaging in interactive lectures/discussions on the development of young children, child nutrition and physical development, iodine deficiency prevention, hygiene, trauma prevention, HIV and AIDS and the prevention of oncological diseases.

18. The second campaign and meetings held with local adult and young people were organized by the information centres on radiation safety that had been set up in the framework of the International Chernobyl Research and Information Network project.

19. Some 8,200 copies of the second edition of the Belarusian version of *Facts for Life* were disseminated among the information centres in 11 Chernobyl-affected locations and 21 cities in Belarus. Additional funding was raised for the publication by UNICEF, jointly with UNDP, the Office of the United Nations High Commissioner for Refugees and the Joint United Nations Programme on HIV/AIDS.

20. A *Facts for Life* site was created and provides access to reliable, easily understandable information on child health and development.

21. WHO developed information packages on the effects on health of radiation and on following a healthy lifestyle, targeting specific groups, including primary health-care workers, teachers, local decision makers and the mass media. Using those information materials, WHO organized and participated in a number of tailor-made national workshops held in the affected areas of Belarus, the Russian Federation and Ukraine. The knowledge gained from the activities will enable participating specialists to effectively communicate with Chernobyl-affected populations, address their concerns and information needs and place radiation risks in the context of a broader spectrum of other health risks related to the environment and human behaviour. In addition, WHO organized two subregional workshops in

Kyiv: one in 2012, on the theme "Radiation and health: the lessons of Chernobyl", for local decision makers; and another in 2013, on the theme "Preparedness and response to environmental emergencies: the lessons of Chernobyl and Fukushima", for health specialists and emergency response workers from the three countries.

B. Community-based development

22. UNDP, UNICEF and the United Nations Population Fund implemented a joint project in Belarus in 2010-2013 that was aimed at enhancing human security in the Chernobyl-affected communities and was supported by the United Nations Trust Fund for Human Security. As a result of the initiative, the local population benefited from learning about new opportunities for income generation, minimizing radiation exposure and practicing healthy lifestyles. The local households increased their market profit by 5 to 20 per cent as a result of increased agricultural production and access to markets. The awareness of the local communities about safe and healthy living in the Chernobyl-affected territories increased, in particular through peer support groups for pregnant women, and new mothers and their families; screenings for breast cancer; and by educating health-care specialists.

23. The project supported the opening of 10 local radiation monitoring centres, which now provide the local population with accurate information on the Chernobyl legacy. Approximately 17,000 women were screened for breast cancer, and those identified as a "risk group" were offered a wider medical examination. Approximately 7,000 women were trained in breast self-examination techniques. Eleven self-support groups for pregnant women and new mothers were active in the target villages. A survey demonstrated that more than 90 per cent of the support group members had correctly identified elevated radiation exposure risks and the ways to minimize radiation exposure.

24. UNDP completed successful piloting of the area-based development approach in four Chernobyl-affected districts of Belarus. It supported the involvement of citizens in socioeconomic development at the local level, resulting in 61 community-based initiatives in the field of health care, energy efficiency and sports. Vulnerable groups, especially women and youth, acquired access to sustainable sources of employment and income-generation as well as capacity-building and market opportunities at the local level. The introduction of the area-based development approach unveiled broader opportunities for the introduction of a "local development agenda", including expansion of the approach to three more regions of Belarus.

25. In Ukraine, the area-based development approach to local development, piloted by UNDP in the Chernobyl-affected regions, became a national best practice. It provided a solid platform for remarkable expansion nationwide through the joint European Union/UNDP initiative to support community-led development in rural areas. Currently, the UNDP-led community-based initiatives contribute to the sustainable local development of all regions of Ukraine, including those affected by the Chernobyl accident. More than $30 million has already been invested to support 2,000 community initiatives in all 24 oblasts and the Autonomous Republic of Crimea. All Chernobyl-affected regions of Ukraine are receiving support for the implementation of local community-based initiatives. The communities are actively participating in the process and thus overcoming the "victim's syndrome" and

rebuilding community dignity. Local governments are mobilizing resources to provide matching funding for the programme.

26. In 2009-2012 UNDP also worked in Ukraine on an "Oxford volunteers for Chernobyl" scheme in cooperation with United Nations Volunteers (UNV), the Oxford University Ukrainian Society and the National University of Kyiv-Mohyla Academy. The goal of the programme was to provide knowledge resources and strengthen the developmental process in the Chernobyl-affected areas through international cooperation and volunteerism. Each year, some 10 international and national students participated in community-based activities. In 2011, UNV and UNDP teams in Ukraine, with the support of the United States Embassy in the country and two scholarships provided by the University of Toronto (Canada), hosted 12 students for three weeks of community-based activities in Kyiv and in Chernobyl-affected communities.

C. Subregional cooperation

27. The UNDP Office of United Nations Coordination of International Cooperation on Chernobyl has worked to strengthen subregional cooperation, in particular among UNDP Chernobyl teams in Belarus, the Russian Federation and Ukraine. It continued building synergies in three priority areas: information provision, policy advice and community development. Subregional annual conferences of UNDP Chernobyl teams were held in March 2011 and February 2012.

28. The replication of best practices between the areas that face developmental challenges similar to those of the Chernobyl-affected regions remains a priority of subregional cooperation. Territories around the former nuclear testing site of Semipalatinsk in Kazakhstan and uranium tailings in Central Asia face problems similar to those of the Chernobyl-affected areas, which are related to social exclusion, lack of opportunities, a low standard of living, especially in rural settlements, and the fear of radiation exposure. A number of knowledge management exchanges between the UNDP Chernobyl team and the relevant programmes in Central Asia took place in 2010-2013.

D. Policy advice

29. The recommendations developed during the previous reporting periods remain in effect. The Government of Belarus prioritized the sustainable socioeconomic development of the Chernobyl-affected areas over recovery measures, and UNDP will help to elaborate solutions for addressing the concrete socioeconomic needs of the affected communities. In Ukraine, UNDP is ready to support the Government in putting in place a legal framework that will allow local populations to resume economic activities and life in areas that will return to normalcy when and where the zoning system is abolished.

E. Infrastructure

30. In 2011-2013, the World Bank continued to provide assistance to Belarus, including through an additional loan of $30 million to scale up energy and gas

connection activities in the Chernobyl-affected areas. Energy efficiency measures are being implemented to address such immediate needs as the replacement of old and inefficient boilers and heat distribution systems; the installation of new windows and improved insulation; and the restoration of essential heat and hot water services in social institutions, namely, schools, hospitals and orphanages. Investments in residential gas connections are facilitating the provision of clean and improved space heating to households that had been burning wood, which has negative environmental and health consequences. The projects are being implemented in the Brest, Gomel and Mogilev regions of Belarus and benefit from the strong commitment and ownership of the national and local government.

31. As result of the project, about 250,000 students, teachers, patients, and medical staff have benefited from improved energy efficient services; 3,774 individual houses (about 10,000 beneficiaries) previously burning wood inside their homes have been connected to reliable gas heating; and 335 buildings have been rehabilitated, including with improved lighting in 224 of the buildings and the installation of new windows in 111. The reduction of carbon dioxide emissions attributed to heat and electricity generation is estimated to be 106,000 tons per year.

F. Health

32. The health consequences of the Chernobyl accident have been the main focus of the WHO Chernobyl programme since 1986.[1] In 2003-2005, WHO played a key role in the inter-agency Chernobyl Forum initiative and conducted a review and synthesis of the evidence in order to assess the health impact of the accident and provide health policy recommendations. The work resulted in the publication of the benchmark WHO report entitled *Health Effects of the Chernobyl Accident and Special Health Care Programmes: Report of the United Nations Chernobyl Forum Expert Group "Health"*, which was published in English in 2006[2] and in Russian in 2009.[3] The findings of the report were used as a basis for the development of training and information packages during the implementation of the International Chernobyl Research and Information Network project in 2009-2013.

33. The United Nations Scientific Committee on the Effects of Atomic Radiation is the body specifically mandated by the General Assembly to assess scientifically the levels and effects of exposure to sources of ionizing radiation. In 2008, in collaboration with scientists from Belarus, the Russian Federation and Ukraine, the Committee submitted a report to the Assembly on its most updated findings in respect of the health effects caused by irradiation from the accident (see A/63/46). The United Nations published the supporting scientific annexes in English in 2011[4] and in Russian in 2012, to facilitate dissemination to those most affected by the accident. The findings of the 2008 Committee report are in agreement with the 2006 WHO report.

34. Using information available to it in the intervening period since the accident, the 2008 report[4] reconfirmed that two workers had died in the immediate aftermath, and 134 plant staff and emergency personnel had suffered acute radiation syndrome,

[1] See http://www.who.int/ionizing_radiation/chernobyl/en/.

[2] See http://whqlibdoc.who.int/publications/2006/9241594179_eng.pdf.

[3] See http://whqlibdoc.who.int/publications/2009/9789244594179_rus.pdf.

[4] Available from http://www.unscear.org/docs/reports/2008/11-80076_Report_2008_Annex_D.pdf.

which had proved fatal for 28 of them. Several hundred thousand workers had subsequently been involved in recovery operations. Among those exposed to the highest radiation doses in 1986 and 1987, there had been some reports of increased incidence of leukaemia and of cataracts, but there was no other consistent evidence of other radiation-related health effects. Substantial deposits of radioactive material had led to serious social and economic disruption to large segments of the population in Belarus, the Russian Federation and Ukraine. Among the people who were children or adolescents in 1986 in those countries, more than 6,000 cases of thyroid cancer had been reported by 2006, of which a substantial portion could be attributed to drinking milk contaminated with the short-lived radionuclide iodine-131.[5] Relatively few cases had proved fatal by 2005. In the longer term, the general population was also exposed chronically to low levels of radiation, but there had been no consistent evidence of any other radiation-related health effects in the general population.

35. As part of its ongoing work, the Committee will continue to evaluate relevant information to provide a scientific basis for better understanding of the effects of radiation on health.

36. In 2010, the WHO International Agency for Research on Cancer completed the European Commission-funded project Agenda for Research on Chernobyl Health, the objective of which was to develop a strategic agenda for future health-related Chernobyl research. The project was undertaken by a multidisciplinary group of Chernobyl experts on the health consequences of the accident. The group identified and prioritized potential studies, assessed their feasibility, cost-effectiveness and likelihood of success, and provided a comprehensive strategic agenda for future research.

37. In 2012, as the next step towards implementing the project recommendations, the International Agency for Research on Cancer submitted to the European Commission, under the seventh Framework Programme of the European Atomic Energy Community, a proposal for funding of cooperation on Chernobyl health research. The initiative, which will be launched in November 2013, emphasizes the need to build partnerships with the three affected countries as well as with Japan, the United States of America and European countries, in order to take the Chernobyl health research agenda forward. The goal is to bring together both key scientific players and funding partners. The aim of the initiative is to set up a coordinating mechanism and to test potential infrastructures for conducting studies on health risks following the Chernobyl accident.

38. The International Federation of Red Cross and Red Crescent Societies, together with its member national societies in the three countries, continued to implement its Chernobyl Humanitarian Assistance and Rehabilitation Programme, ensuring the detection of thyroid gland cancer and other thyroid pathologies and addressing the basic health needs of the affected population. It is the longest individual humanitarian assistance programme in the history of the Federation, implemented over a period of 22 years. Although the three Red Cross national societies, with the support of the Federation, have been trying to secure funding from international donors to continue the project, by the end of 2012 the efforts

[5] To some degree, intensive screening would also have increased the rate of detection and hence the reporting of cases that might not have been caused by radiation exposure and that otherwise would not have been observed.

concentrated on finding alternative domestic funding sources and further integration of services with national programmes.

39. An estimated 4.2 million people have benefited from this long-lasting initiative. In particular, in 1990-1993, 561,000 beneficiaries received information on the background radiation surface contamination of objects; in 1992-1997, 401,000 people received health checks; in 1994-2012, 721,000 obtained multivitamins for children; in 1997-2012, 190,000 benefited from direct psychosocial support; and in 1997-2012, 1,605,000 received thyroid gland screening. Half of the latter had their thyroids screened for the first time in their lives; 171,000 were diagnosed with thyroid pathologies and referred for further treatment. Thyroid screening was undertaken by six mobile units that operated in the three countries most affected by the Chernobyl accident.

40. Since 2009, UNDP has been working in Belarus on the establishment of the International Scientific and Practical Centre of Thyroid Disease and has provided assistance in the elaboration and implementation of up-to-date methods and technologies, including for screenings and the treatment and rehabilitation of patients with thyroid cancer. The screenings were extended to 1,500 residents of the contaminated areas. As a result of the initiative, the relevant data has been added to the database on thyroid disease; a biological tissue bank has been established; and research has been conducted on iodine deficiency.

41. UNICEF activities in the area of health and the promotion of healthy lifestyles are described in sections A and B above.

G. Radiation mitigation and standard setting

42. In 2010-2013, IAEA provided radiological support for the rehabilitation of the affected areas and the enhancement of national capacities to control public exposure; assistance in the remediation of the affected territories using environmentally sound and cost-effective technologies; and assistance in improving safety at the Chernobyl nuclear power plant site and in radioactive waste management. IAEA continues to cooperate with other United Nations organizations on a range of activities that focus on mitigating the health, environmental and socioeconomic consequences of the accident.

43. IAEA also continued its implementation of two regional projects aimed at enhancing the radiation safety of the population and at promoting the socioeconomic rehabilitation of the Chernobyl-affected areas. The ongoing work aims to provide technical, scientific and information support for the gradual transition of the affected territories to normal radiological environmental conditions and to facilitate unrestricted economic activities. In 2010, IAEA organized an international workshop on the modern experience in the remediation of the areas affected by the Chernobyl accident in the Gomel region of Belarus. The workshop stressed the importance of applying modern remediation strategies to affected areas to help them to return to normalcy.

44. IAEA continues to support Belarus in improving the effectiveness of radiotherapy services for oncological patients. A modern single-mode linear accelerator was installed and put into operation in the Gomel regional oncological dispensary.

45. The projects IAEA is undertaking in Belarus and Ukraine at the national level and one at the regional level, as part of its 2012-2013 technical cooperation programme, amount to around 2 million euros (€). A similar level of IAEA support for the mitigation of the consequences of the Chernobyl accident is foreseen for its 2014-2015 technical cooperation programme.

H. Reactor safety and nuclear waste management

46. The Chernobyl accident spurred large-scale cooperation to support Ukraine in building a new shelter around the damaged reactor. The European Bank for Reconstruction and Development (EBRD) manages a project to support the decommissioning of units 1 to 3 of Chernobyl nuclear power plant and another to convert unit 4 and the old shelter around it into a safe state. Forty-five donors and EBRD have so far mobilized more than €2 billion for the implementation of the two programmes.

47. As part of the support provided for decommissioning the plant, EBRD has managed funds to finance the construction of a liquid radwaste treatment facility, scheduled to become operational in 2013. The same funds also finance the completion of a storage facility for spent fuel assemblies. From the point of view of nuclear safety, this is a key priority for the site, which reached an important milestone by receiving approval of the safety analysis report from the Ukrainian nuclear regulator in 2013.

48. The shelter implementation plan to transform Chernobyl unit 4 into a safe condition, also recently reached a crucial milestone, when Ukrainian authorities granted approval for the design of the new safe confinement. The project has made significant progress on the ground. A clean concrete layer has been laid in the new safe confinement assembly area with its large lifting towers, and access to the zone has been simplified, making the deployment of the hundreds of people working there much more efficient. The first segment has been assembled and was lifted to a height of 22 metres in November 2012; the second lift took it to a height of 55 metres in June 2013, as scheduled. Four more lifts and the installation of equipment for future deconstruction work remain to be carried out before the new safe confinement can slide into place to cover the destroyed unit.

49. Maintaining schedules and budgets for these complex projects remains an ongoing challenge for EBRD. The Bank insists on high standards in respect of radiation protection and the health and safety of workers in the Chernobyl projects and is satisfied with the good record achieved in that regard.

50. In line with the Chernobyl Forum recommendations, IAEA continues to support Ukraine in planning the decommissioning of the Chernobyl nuclear power plant and in improving radioactive waste management. It also continues to provide specific assistance in developing the decommissioning plan for the nuclear power plant cooling pond and in assessing its impact on ecological safety.

I. Environmental security

51. As part of the Environment and Security Initiative,[6] in January 2013 the United Nations Environment Programme (UNEP) commenced a project on the assessment of environmental risks in the exclusion zone along the Ukrainian and Belarusian borders. It aims to identify and map environmental risks on the Belarusian-Ukrainian border in the Chernobyl exclusion zone and to develop a sanitary regulation for operations there. On 6 March 2013, at the first coordination meeting held for the project, the decision was made to undertake field research, data analysis, mapping and elaboration of relevant recommendations.

52. The project activities will focus on assessing gamma radiation, the radioactive contamination of the soil by caesium-137 and americium-241 and of the air by caesium-137, strontium-90, isotopes of plutonium, and americium-241, the development of maps of minimum effective dose and contamination by the aforementioned radionuclides, and the elaboration of the recommendations for safe implementation of demarcation work (in Belarus) and border guard duty (in Belarus and Ukraine) in the exclusion zone. The project is planned for completion by the end of 2014.

53. Another new initiative by the Global Environment Facility of UNEP will aim to expand current use of the Chernobyl exclusion zone, in order to encompass ecosystem values and provide ecosystem services to the benefit of local, national and international stakeholders. The project activities will include establishment of a protected area network in and around the zone in order to maintain carbon stocks in forest and non-forest lands, in wetlands and in other habitats within the zone. Active involvement and ownership by national stakeholders will ensure the mainstreaming of project results. Effective communication channels between governmental ministries, agencies and departments, scientists and residents around the zone will be established.

54. The Global Environment Facility project will also include the creation of a research and environmental protection centre that will collect and synthesize existing research, undertake a gap analysis and become the repository for existing and future research. Participation of international scientific organizations in the project activities will facilitate the effective scale-up and replication of experiences.

55. In Ukraine, UNDP is working in the Chernobyl-affected areas of the Rivne, Zhytomyr and Kyiv oblasts to mainstream environmental issues into local policies and practice. Funded by the Government of Poland, the initiative is aimed at improving the strategic planning and decision-making capacity of local authorities to deal with environmental issues and manage available environmental assets. During 2012, environmental assessments of four affected territories were prepared and used for compiling local environmental strategic plans. An environmental forum for the Chernobyl-affected regions has been established to support environmental

[6] The Initiative was established in 2003 by UNEP, UNDP and the Organization for Security and Cooperation in Europe. The North Atlantic Treaty Organization became an associate member of the Initiative in 2004, through its Public Diplomacy Division. From 2006, the Economic Commission for Europe and the Regional Environment Center for Central and Eastern Europe joined the Initiative. The Initiative seeks to facilitate a process within which key public decision makers in South Eastern and Eastern Europe, Central Asia and the Caucasus can motivate action to advance and protect both peace and the environment at the same time.

considerations, planning and management, educational activities, communication and public engagement in those areas.

IV. Advocacy, information and public awareness

A. Anniversary commemorations

56. Anniversaries of the Chernobyl accident offer an opportunity to remind the world of the problems that the affected region continues to face and to promote potential solutions.

57. The twenty-fifth anniversary of the Chernobyl accident was marked by the visit of the Secretary-General to the site of the Chernobyl nuclear power plant and an international conference on the theme "Twenty-five years after the Chernobyl Accident: safety for the future", which was held in Kyiv in April 2011. At United Nations Headquarters in New York, a special commemorative meeting was held by the General Assembly on 26 April 2011, and a photo exhibition was organized by the Permanent Missions to the United Nations of Belarus, the Russian Federation and Ukraine, jointly with UNDP.

58. Statements attributable to the Spokesman for the Secretary-General, released on the twenty-fifth, twenty-sixth and twenty-seventh anniversaries of the Chernobyl disaster and widely circulated in English and Russian, addressed the huge impact of the accident on the region, while also expressing confidence that the communities affected by the accident increasingly have the means to lead normal lives. The Secretary-General called upon the international community to continue to support the recovery of the Chernobyl-affected areas.

B. Goodwill Ambassador

59. In February 2007, tennis star Maria Sharapova became a UNDP Goodwill Ambassador. Ms. Sharapova partnered with the Office of United Nations Coordination of International Cooperation on Chernobyl in delivering the message of hope to the Chernobyl-affected communities, particularly to youth. Since September 2008, UNDP and the Maria Sharapova Foundation have been partnering on a scholarship programme that supports gifted and talented youth from the Chernobyl-affected areas of Belarus.

60. A new project aimed at sports recovery in the Chernobyl-affected areas of Belarus and the Russian Federation was initiated in 2012. With support from the Maria Sharapova Foundation, opportunities will be given to local youth to practice lawn tennis, athletics and other sports, thus developing their talents and capabilities.

61. On the occasion of the twenty-fifth anniversary of the Chernobyl accident, Ms. Sharapova released an inspirational video message for youth from the Chernobyl-affected communities.

62. In 2011-2013, special attention was paid by the UNDP office in Belarus to the role of rural women in Chernobyl recovery efforts. Celebration of the International Day of Rural Women in Minsk involved the participation of State entities, non-governmental organizations, prominent rural women and the screening of a

documentary about the efforts of Chernobyl-affected communities aimed at recovery and development.

V. Lessons learned and knowledge management

63. In 2010-2013, IAEA prepared a wide range of documents, including on a remediation strategy for rural areas affected by the Chernobyl accident; on recommendations on radiation protection for the public, remediation and the return to economic use of the areas of Belarus, the Russian Federation and Ukraine subjected to contamination following the accident at the Chernobyl nuclear power plant in 1986 (2012); and an electronic register of the territories contaminated after the disaster at the Chernobyl nuclear power plant (2012). The documents represent an important step in harmonizing relevant national concepts and ensuring sustainable knowledge management.

64. IAEA also developed tools to aid decision-making for the evaluation of remediation strategies in the affected countries, including an update and extension of harmonized national monitoring databases intended for such purposes. Based on that data, and with help of the IAEA decision support tool on remediation strategies after the Chernobyl accident, recommendations on remediation strategies were developed and presented to the competent authorities of Belarus, the Russian Federation and Ukraine. As a result, the technical capabilities of the Member States for remediation planning were enhanced.

65. In 2012, IAEA published *Guidelines for Remediation Strategies to Reduce the Radiological Consequences of Environmental Contamination*. It targets individuals and authorities who deal with remediation projects or planning remediation strategies and includes an overview of the current state of knowledge on remediation planning for stakeholders at different levels of decision-making.

66. IAEA also supported the publication of new national guidelines on the application of ecologically sound remediation technology and on the optimized use of forest resources in Belarus and the Russian Federation.

67. WHO has developed a training toolkit in Russian for primary health-care sector workers to assist in providing information to concerned populations, young parents and patients, among others on the health risks of radiation. In addition, WHO has produced an information brochure, available in Russian, describing the experience gained through implementation of the International Chernobyl Research and Information Network project.[7]

68. In March 2013, the Office for the Coordination of Humanitarian Affairs released a study on linking humanitarian and nuclear response systems. The study was produced at the request of the Secretary-General in the aftermath of the Fukushima Daiichi nuclear power plant accident. The report draws upon the review of existing arrangements for international coordination of the response to nuclear emergencies and the roles and experiences of relevant organizations of the United Nations system in responding to radiological and nuclear emergencies. The report highlighted the extensive experience of UNDP in assisting affected countries with recovery in the aftermath of the Chernobyl accident. One of the recommendations

[7] http://chernobyl.info/Portals/0/Docs/ru/pdf_ru/publication%20WHO_ICRIN_S.pdf.

contained in the study was for UNDP to join the Inter-Agency Committee on Radiological and Nuclear Emergencies and to ensure that the human dimension of nuclear accidents is taken into consideration in early recovery efforts.

69. A number of lessons have been learned by UNDP on the developmental challenges that emerge in the aftermath of nuclear disaster and the recovery efforts that are specific to nuclear fallout. Chernobyl recovery work has provided an unprecedented experience in ways to tackle the human consequences of nuclear emergencies. Over the years of project implementation, UNDP has identified and tested solutions that work on the ground and can be replicated in other nuclear disaster situations. In 2013, UNDP launched a knowledge initiative to codify those experiences and produced a study entitled "Recovery from Chernobyl and other nuclear emergencies: experiences and lessons learned". The initiative was conducted in the framework of the United Nations action plan on Chernobyl to 2016.

Other initiatives

70. In the aftermath of the accident at the Fukushima Daiichi nuclear power plant in April 2011, the Secretary-General commissioned a United Nations system-wide study on the implications of the accident at the Fukushima Daiichi nuclear power plant (SG/HLM/2011/1). The report was released in September 2011 and contained a number of references to the consequences of the Chernobyl accident, such as food contamination, the effects on biota, anxiety in the general population and the lack of economic opportunities and information on the consequences of the disaster. In looking to the future, the Secretary-General acknowledged the need to focus on the link between the nuclear response system and the humanitarian coordination systems.

VI. Conclusions and recommendations

71. The United Nations has long played a crucial role in addressing the challenges faced by the Chernobyl-affected territories, initially in the immediate relief efforts following the accident and now in the focus on recovery.

72. The United Nations system and Governments have agreed to address the lingering consequences of the Chernobyl accident by supporting the affected communities in their return to normalcy and by fostering the region's long-term development. In the second half of the Decade of Recovery and Sustainable Development of the Affected Regions (2006-2016), the United Nations will continue to address the pending needs of the Chernobyl-affected communities. Effort will be made to initiate at least one more multi-agency subregional programme with a focus on environmental recovery, namely, on disaster preparedness in respect of the forest and peatland fires in Chernobyl-affected areas, on building the resilience of communities and on linking those activities to the sustainable development agenda.

73. United Nations country teams will make a continuous effort to keep the issues of post-Chernobyl recovery high on the inter-agency and international agendas. Coordination and cooperation among the organizations and bodies of the United Nations system should be guided by the developmental approach to Chernobyl, the United Nations action plan on Chernobyl to 2016 and the goal of enabling the Chernobyl-affected communities to lead normal lives. Subregional cooperation

should be continued, and synergies obtained from knowledge-sharing and best practices replication. One of the major challenges that lie ahead is the mobilization of more donor resources to support the local initiatives, helping the most vulnerable and ensuring the long-term sustainable development of the Chernobyl-affected territories.

74. The nuclear accident at the Fukushima Daiichi nuclear plant once again highlighted the importance of the issue of sustainable development prospects in areas with a nuclear legacy. The experience gained by UNDP in Europe and the Commonwealth of Independent States region in tackling the human consequences in the Chernobyl-affected regions, in communities affected by nuclear tests in Semipalatinsk (Kazakhstan) and by the uranium tailings remediation projects in Central Asia has become increasingly relevant. Some of the challenges are unique to the nuclear emergencies, and their human consequences can be deep rooted and long-lasting. They include, in particular, stigma and fear, leading to a "victim mentality" and a culture of dependency in the affected areas.

75. The implementation of UNDP recovery and development projects also revealed some distinct features of tailor-made programming, which are different from those of other types of disasters. The needs of individuals and communities are best addressed if programmes provide up-to-date, accurate information to local people on the risks and impact of the disaster as well as psychological support to ease fears, anxiety, helplessness and feelings of abandonment. Forward-looking community-based projects should promote a spirit of activism and assist in the restoration of self-reliance and self. The effectiveness of coordination mechanisms among the organizations of the United Nations system involved in recovery efforts, according to their distinct mandates, is also critical for the success of those efforts.

76. These programmatic developmental approaches that address the unique human dimensions of nuclear disasters may serve as a guide in dealing with similar emergencies in the future. By the end of the third decade following the Chernobyl accident, it would be important to properly document and codify the solutions so that they can be applied and replicated in other nuclear disaster situations worldwide. UNDP is committed to putting into good use this experience. In order to apply the important lessons learned in other nuclear disaster situations worldwide, UNDP will be joining the platform of the Inter-Agency Committee on Radiological and Nuclear Emergencies. Other opportunities for institutionalizing the experience of UNDP in disaster risk reduction, preparedness, response and recovery will be explored.

77. The thirtieth anniversary of the Chernobyl nuclear accident coincides with the completion of the United Nations action plan on Chernobyl to 2016. This may provide the opportunity to reflect upon the results achieved and complete the institutionalization of the experiences in tackling the human consequences of nuclear disaster. UNDP, in its role as lead agency for United Nations activities on Chernobyl, is committed to giving a stronger voice to the human dimension of preparedness and recovery from nuclear emergencies at United Nations level and to incorporating that knowledge and experience into UNDP developmental programming worldwide.

78. In the remaining years of the United Nations action plan on Chernobyl to 2016, UNDP is prepared to lead the dialogue with organizations of the United Nations system and Member States on the future of inter-agency cooperation in respect of the human consequences of the Chernobyl accident and other man-made disasters.

Annex I

Report of Belarus

[Original: Russian]

Addressing the impact of the Chernobyl disaster is a matter of national significance for the Republic of Belarus. Half of the country's 118 districts were affected, 21 of which are still experiencing severe effects. All of the relevant hands-on work is carried out under national programmes to address the impact of the disaster at the Chernobyl nuclear power plant. Programme funding represents a significant portion of the national budget.

Between 1991 and 2010, four government Chernobyl programmes were carried out, at a cost of some $19.4 billion.

In 2011, the country started moving to a new phase in addressing the problems arising from the disaster, a central aspect of which is to restore and develop the affected areas. The fifth national programme is now under way and will continue through 2015. Its objectives are to continue reducing the risk of adverse health impacts and shift from restoration of the area to sustainable socioeconomic development thereof, while ensuring that radiation safety requirements are fully met.

It is unlawful in the Republic of Belarus to engage in industrial production or sale of any items containing radionuclides in excess of safe levels.

Since 1 million hectares of land contaminated with radionuclides are under agricultural production, special protective activities include shipping phosphorus and potash fertilizers to the contaminated areas and introducing them into the soil, liming acidic soil, cultivating hay and grazing lands, and providing mixed, cesium-absorbent feed.

Protective measures for agriculture and special measures in the area of forestry ensure that industry requirements for purity of output are met. These activities will remain necessary in future.

There is an effective radiation monitoring system for food products, food commodities, agricultural raw materials and forest products from areas with radionuclide contamination. There are more than 830 radiation monitoring offices in operation and over 2,000 radiometric and spectrometry devices in use. Accordingly, there have in recent years been no recorded cases of food products with radionuclide content above allowed levels finding their way into the retail network.

Issues related to the health of the afflicted population, disaster response workers and especially children who live in areas contaminated with radionuclides are central to national policy. The State-funded medical system for monitoring, prophylactic exams, diagnostics, disease treatment, wellness and sanatorium and health resort treatment compensates to some extent for the public health damage wrought by the Chernobyl disaster.

More than 1,500,000 disaster victims are under medical observation, including some 270,000 children. There is a national register of persons affected by radioactivity as a result of the Chernobyl disaster.

Children living in the affected areas receive group treatments and wellness care at sanatoria and health resorts. There is now a network of paediatric rehabilitation and wellness centres that welcome groups of children year round.

Children who are enrolled in schools in the areas with radioactive contamination (118,000 people) receive hot meals free of charge.

Improved medical care and a large-scale sanatorium, health resort and wellness programme have done much to hold down the occurrence of disease in the affected population, particularly among children.

The main national policy to address the impact of the Chernobyl disaster in the near term involves growing the social and economic potential of the affected regions, restoring living conditions and developing the afflicted areas effectively and systematically by harmonizing social protection measures and redirecting resources for economic and social development in the regions.

The contaminated areas cannot be sustainably developed without State support and contributions from international partners to improve rural residents' individual garden plots, develop self-employment and social infrastructure in the afflicted regions, boost residents' economic activity and adaptability to market conditions, raise income and reduce dependence on State social assistance.

Strategic objectives for the current period through 2020 include the following:

- Radiation and environmental rehabilitation and sustainable socioeconomic development of the contaminated areas through effective regional business planning, regional development and special projects.
- Increased radiological and environmental awareness and incentives to develop active members of the community, impart practical radiological and environmental knowledge and actively involve the community in improving living conditions.
- Systematic information support during restoration of the afflicted regions, and regional public image enhancement.
- A shift from special events and one-time projects to systematic work across the afflicted areas.
- Preservation of the cultural heritage of the affected areas and commemoration of the disaster.

Establishing a welcoming climate for foreign investments; introducing innovative social policy in the contaminated regions; and fostering economic development of the regions, small and medium enterprises, self-employment and job creation all remain relevant to current needs.

The primary objectives of restoration — genuine economic rebirth and sustainable development — will be based on reviving the afflicted districts' economic potential, adopting up-to-date industrial methods in agribusiness and forestry and improving the well-being of the people in the area.

The Republic of Belarus notes that the assistance of United Nations system organizations in restoring social infrastructure in the afflicted regions is of particular importance.

Annex II

Report of Ukraine

[Original: Russian]

International cooperation on issues of health care, social protection and radiation protection, including drawing on relevant international lessons learned, is a national policy priority for Ukraine in responding to the impact of the Chernobyl disaster.

From 2011 to 2013, the State Exclusion Zone Management Agency of Ukraine implemented government policy to eliminate or mitigate the impact of the Chernobyl disaster, including in the specific areas listed below:

- Addressing the medical, environmental and socioeconomic impact of the Chernobyl disaster.
- Support for environmental safety in the exclusion zone, including the zone's barrier function.
- Handling of radioactive wastes, depleted nuclear fuel and ionizing radiation sources; decommissioning of the Chernobyl nuclear power plant units; conversion of the Shelter facility into an environmentally safe system; and rehabilitation of lands contaminated by radiation.
- Physical protection of nuclear facilities and materials, radioactive wastes and other ionizing radiation sources at enterprises, institutions and organizations for which the State Exclusion Zone Management Agency is responsible.

The Government of Ukraine has for many years been successfully engaged with United Nations agencies on issues related to the medical, environmental and socioeconomic impact of the Chernobyl disaster. Fostering the rebirth and development of the afflicted areas is the primary objective of all of the relevant international projects. An International Chernobyl Research and Information Network project conducted in 2011 and 2012 included activities designed to encourage healthy lifestyles and help local communities return to normal.

A project to integrate environmental protection into the local development strategy for areas afflicted by the Chernobyl disaster was begun in 2012 in the towns of Korosten, Zhytomyr oblast; Rokitne, Rivne oblast; and Bohuslav, Kyiv oblast. These three oblasts were contaminated as a result of the disaster. The project incorporated environmental factors into regional-level strategic development planning for the afflicted areas. It included a Chernobyl environmental forum, whose purpose was to present contemporary approaches and shape environmental awareness; support effective environmental preservation planning and management; and increase public awareness and involvement in actions that directly protect the environment, to achieve consistent development in the afflicted areas.

A socioeconomic development project targeting districts in Rovensk oblast that were contaminated as a result of the Chernobyl disaster was completed in 2012. The project was designed to support local government efforts to improve living conditions and the economic and psychological condition of those living in areas contaminated by radiation. The project was carried out in 14 communities in the district of Vladimirets.

Given the long-term nature of the disaster's impact and the findings presented at the international conference held to mark the twenty-fifth anniversary of the Chernobyl disaster and consider safety issues for the future, the Government of Ukraine believes that cooperation with the United Nations and other international organizations to address the medical, environmental and socioeconomic impact of the Chernobyl disaster must continue.

To reduce the impact of the disaster, a safety assessment was done at the Buryakovka radioactive waste storage site. This was carried out under the annual European Commission action programme (Nuclear Safety Cooperation Instrument), as part of two international technical assistance projects to improve infrastructure for handling radioactive waste in the Chernobyl exclusion zone. A technical and economic assessment of the structure and design of the rail line linking existing and future radioactive waste storage and disposal facilities located in the Chernobyl exclusion zone (including the Chernobyl nuclear power plant site) to the national rail system was done to ensure and improve radioactive waste transportation safety.

A primary aspect of the radiation hazard that the exclusion zone presents to the areas bordering it is the movement of radionuclides by means of water, air (carried by wind) and biological and artificial (man-made) pathways. Since the vast expanses of forest in the exclusion zone provide effective protection against the aerial movement of radionuclides, work is being done to protect and manage the forests, including measures to prevent forest fires and revitalize, restore and cultivate the forest. These activities have warded off major forest fires during the period from 2011 to 2013 and reduced aerial movement of radionuclides from the exclusion zone.

Nine temporary radioactive waste containment sites and three radioactive waste disposal sites were set up in the exclusion area in 1986 and 1987 in the aftermath of the Chernobyl disaster. These sites are being monitored. The total volume of radioactive wastes that have accumulated (including equipment, structures and waste now at temporary disposal sites), not counting the Shelter facility, is some 2.8 million cubic metres. Vektor, an industrial facility for deactivating, transporting, processing and disposing of radioactive waste, is being built to address future processing and disposal issues. Construction of the start-up complex of phase I of the Vektor facility, consisting of 25 infrastructure components, is now complete, and operations have begun. In addition, the German company Nukem has built and opened at the Vektor site a specially equipped surface-level solid radioactive waste storage facility to dispose of radioactive waste that formed as the Chernobyl plant was being decommissioned. Future activity at the Vektor complex will include the launch of its second phase, as a centre for processing and disposal of radioactive wastes from Ukraine. Radioactive waste processing capacity (incineration, compaction, encapsulation and containerization) will be developed, and there will be long-term (50- to 100-year) surface storage facilities for long-life and highly active wastes. Under Vektor's first and second phases, a total of 26 disposal and long-term storage facilities for radioactive waste and six special processing installations will be designed and built by 2017.

Construction of the new safe confinement over the Shelter facility is now in its final phase. Plans for the new safe confinement infrastructure are complete. The challenging task of stabilizing the unstable structures and the existing sarcophagus over the damaged reactor by means of the Shelter facility has been successfully concluded.

The stabilization work will enable the most essential structures to remain operational until 2023. Thanks to the subcontractor, a consortium of European companies, work on the new safe confinement is on schedule and moving full speed ahead. The new safe confinement will eventually cover the entire Shelter facility and provide the conditions and technical resources needed so that work to safely dismantle the existing facility and extract highly active radioactive wastes and materials containing nuclear fuel from the destroyed fourth unit can continue for at least 100 years.

The method involving assembly of the new safe confinement at a special construction site, followed by installation in one piece over the Shelter facility, rather than phased on-site assembly, has been approved. That will significantly reduce worker exposure to radiation.

Costs and timelines for erecting the vaulted new safe confinement are being regularly monitored and specified as the work goes forward. The cost of building the new safe confinement now stands at some 935 million euros. There is currently reason to believe that the work will be fully finished by late 2015, with the total project cost coming in at upwards of a billion euros.

Initial work to decommission the Chernobyl nuclear power plant and convert the Shelter facility into an environmentally safe system was done between 2008 and 2012. Safe maintenance of units Nos. 1, 2 and 3, spent nuclear fuel storage facility No. 1 and the Shelter facility and physical protection of the nuclear materials at the Chernobyl industrial facility are all provided for, as is compliance with the relevant non-proliferation safeguards. Preparations are under way for the national programme for the upcoming period, through 2017. The programme is now awaiting approval by the executive agencies. It is essential that these activities be enacted into national law without delay so that the work does not lose momentum and also to guarantee funding from the national budget to decommission units Nos. 1, 2 and 3 and provide safe maintenance during the conversion of the Shelter facility.

The matter of extracting the remains of unit No. 4 from the Shelter facility and disposing of them in accordance with the regulations for long-life radioactive waste is a crucial one that must be resolved. Before transition to the phase of removing the fuel-containing materials from the shelter, equipment must be developed for conditioning the fuel-containing materials, which are lying out in the open, and for extracting them from the facility. Finding a solution to these unique tasks will require continued mobilization of donor nation resources in order to ward off the danger facing the entire planet.

Donor nations are aware that the conversion of the Shelter facility is not fully funded, and that funding is lacking for some aspects of the work to dismantle unstable structures, extract the fuel-containing materials and convert them to make them safe. In the near future, the utmost must be done to galvanize the additional resources required for completion of this work.

Completion of the projects to address the international issue of converting the Shelter facility into a safe system will satisfy the international community's commitment to shut down operations of the three Chernobyl units ahead of schedule. It will fulfil international agreements to decommission the Chernobyl plant and convert the Shelter facility into an environmentally safe system.